

# VICCHEM

*The Right Chemistry*

## **HASTEN<sup>†</sup>**

### **SPRAY ADJUVANT**

# DON'T KILL WEEDS WITHOUT IT.



**VICCHEM.COM.AU**



# HASTEN<sup>†</sup>

## SPRAY ADJUVANT

# IT RUNS IN THE FAMILY.

Leading the way for over 25 years, VICCHEM's HASTEN Spray Adjuvant is the chosen mix for Australia's favourite herbicides, redefining in-crop safety and compatibility. Now, this same HASTEN Spray Adjuvant technology is powering a broader lineup, all crafted to enhance the fruits of your labour.

With HASTEN Spray Adjuvant, your hard work doesn't just go further — it delivers.



### OUTRIGHT<sup>†</sup> 770

OUTRIGHT 770 Spray Adjuvant boosts herbicide effectiveness and conquers hard water challenges with its advanced HASTEN Spray Adjuvant formulation.

### GRAVITATE<sup>†</sup> 707

GRAVITATE 707 Spray Adjuvant enhances agri-chemicals with acidifying action and a pH indicator for optimal spray application.

### GALA<sup>†</sup>

GALA Growth Regulator with its special Gibberellic Acid GA3 formula, safely stimulates growth without flammability or toxicity.

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# REACH FOR VICCHEM.

At VICCHEM, we're all about supporting Australia's growth and helping our farmers get the best from their land. For over 90 years, we've been right here, developing and supplying trusted agri-chemical products to Australian farmers and agronomists, aiming for top-notch results for their farms and our agricultural community.

We know the challenges of farming in Australia like the back of our hand. That's why we're dedicated to finding solutions that work, combining our research, solid science, and plenty of local know-how. This means we're always working on ways to tackle those farming hurdles practically and sustainably.

Our range includes everything from Spray Adjuvants, Wetting Agents, Bloat Remedies, Insecticides, Growth Regulators, and Bale Boost products. We've made sure each product meets the real-world needs of Aussie farmers, focusing on quality and effectiveness.

When results matter, Australian farmers reach for HASTEN Spray Adjuvant.





# HASTEN SPRAY ADJUVANT.



Boost your agri-chemicals' efficiency with HASTEN Spray Adjuvant, the adjuvant that significantly improves droplet adhesion, spread, and active ingredient distribution. Favoured by leading manufacturers of herbicides, insecticides, fungicides, and defoliant, HASTEN Spray Adjuvant is a testament to VICCHEM's commitment to quality and sustainability.

## BENEFITS OF HASTEN SPRAY ADJUVANT



### SUPERIOR PENETRATION

Breaks through waxy weed cuticles, ensuring deeper and more effective herbicide penetration.



### IMPROVED RETENTION

Slows the evaporation of spray droplets, allowing for longer contact time on weed surfaces.



### ENHANCED ADHESION

Aids in keeping spray droplets firmly on weed surfaces, reducing runoff and waste.



### OPTIMAL SPREAD

Increases the coverage of spray droplets, ensuring uniform wetting and spreading on target weeds.



### HOMEGROWN QUALITY

Proudly made from 100% Australian-grown canola oil, reflecting our commitment to local agriculture.



### FORMULATION EXCELLENCE

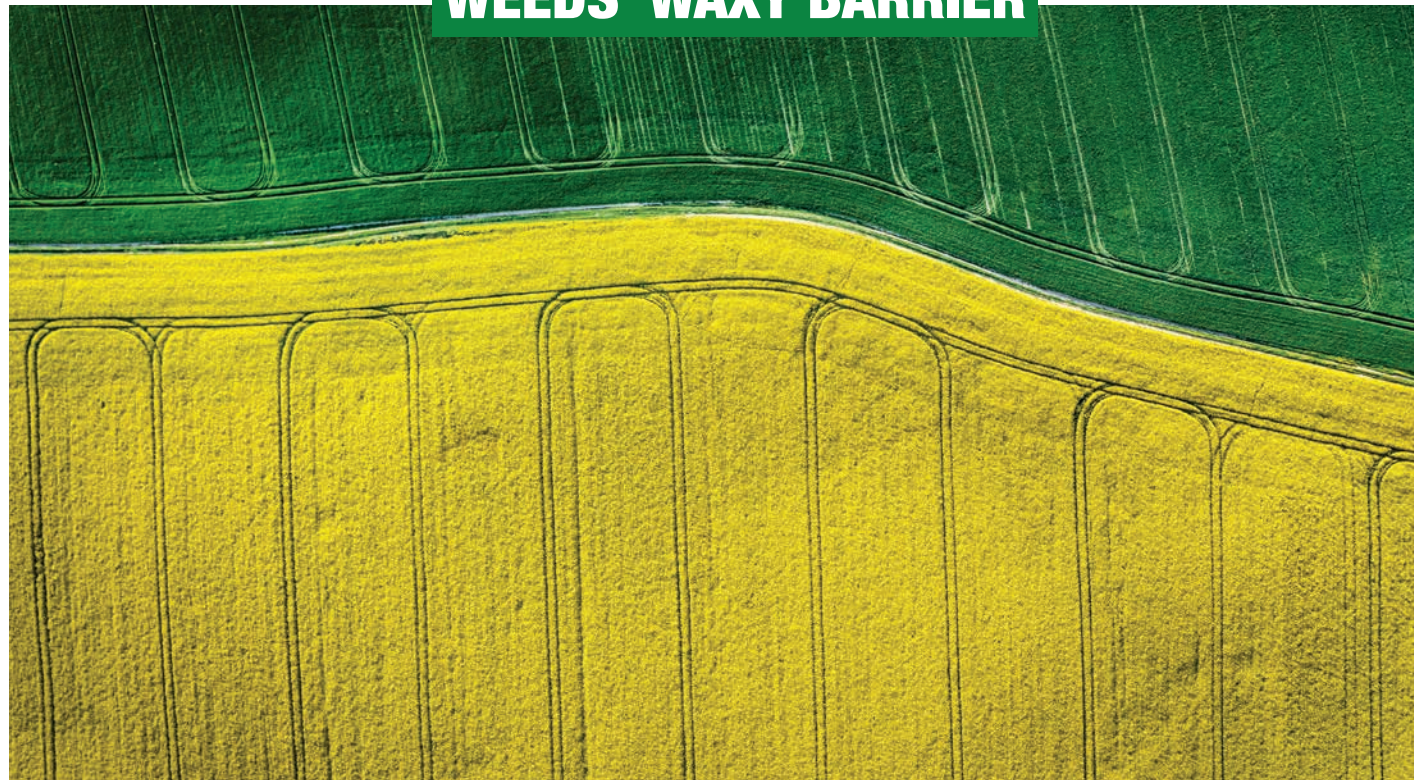
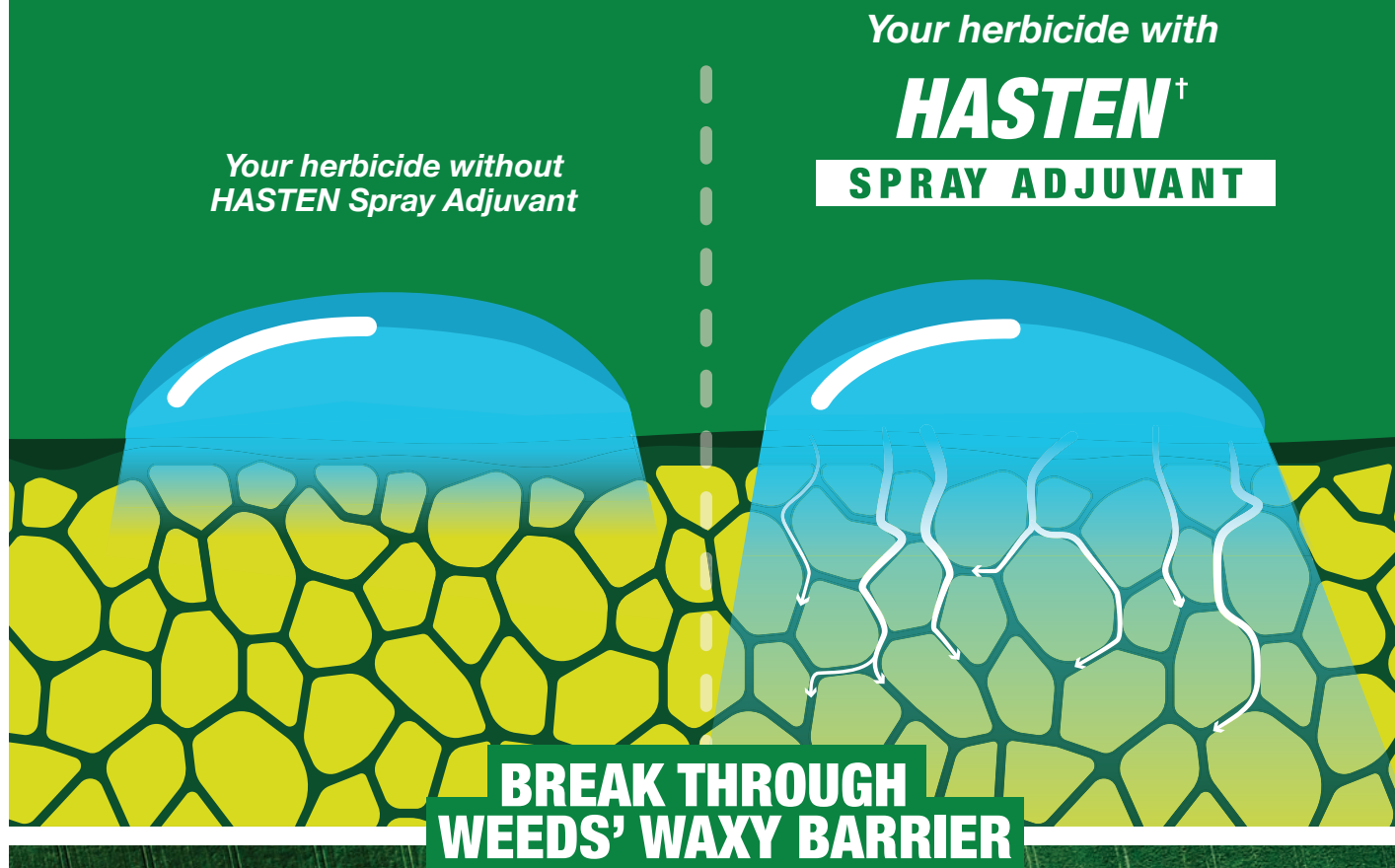
Offers easy dispersion and forms a stable emulsion in tank mixes, guaranteeing reliable performance every time.

By choosing HASTEN Spray Adjuvant, you're not just applying a spray adjuvant; you're investing in a solution that amplifies the efficacy of selective herbicides, insecticides, fungicides, and defoliant across your operations.

# HOW IT WORKS

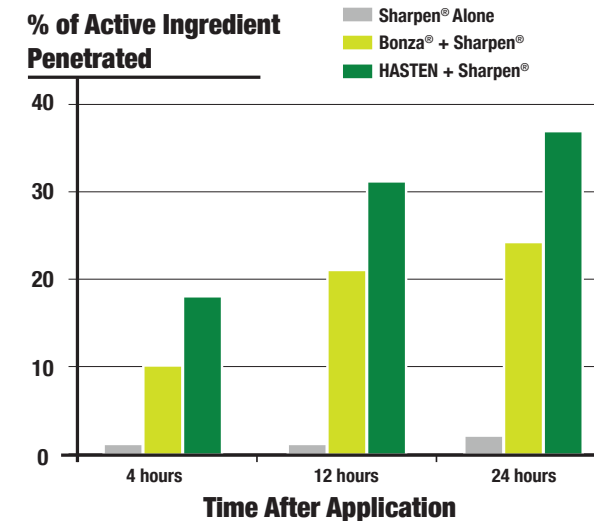
HASTEN Spray Adjuvant tackles the challenge of effective weed control by breaking through the waxy plant cuticle, crucial for enhancing herbicide penetration. Its key mechanism, lipophilic diffusion, involves Ethyl and Methyl Esters that help transport active ingredients directly through these protective barriers.

This action not only accelerates the absorption rate but also ensures thorough coverage and adhesion of the herbicide on the plant surface. By speeding up the process, HASTEN Spray Adjuvant mitigates the risks of evaporation and runoff, making every herbicide application more effective and reliable.



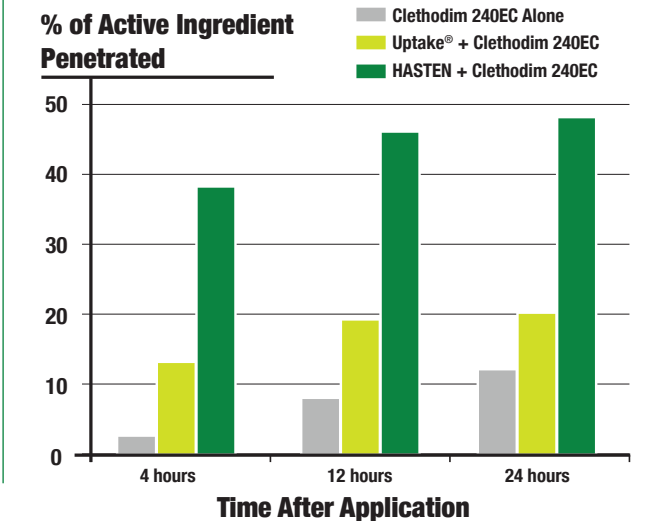
## LEAF CUTICLE PENETRATION SHARPEN<sup>®</sup> SAFLUFENACIL

Laboratory Trials with BASF's Sharpen<sup>®</sup> saflufenacil demonstrated that incorporating HASTEN Spray Adjuvant significantly enhances Active Ingredient penetration through a leaf cuticle over time, outperforming alternative mixes as illustrated in the accompanying chart.



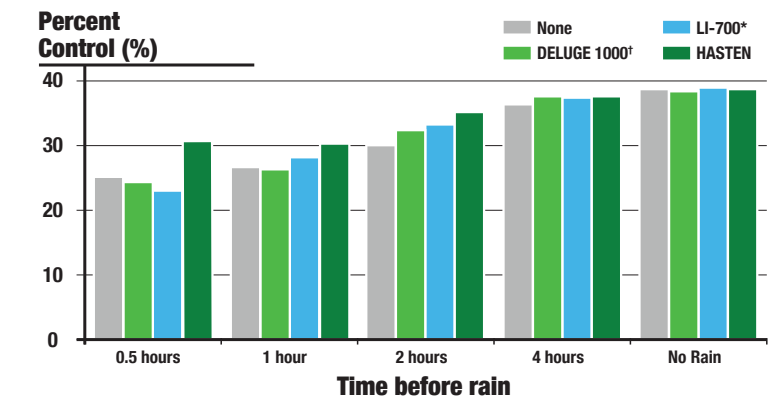
## LEAF CUTICLE PENETRATION CLETHODIM 240EC

Similar Laboratory Trials with Clethodim 240EC and HASTEN Spray Adjuvant demonstrate notably better penetration through a leaf cuticle, enhancing on-farm herbicide performance.



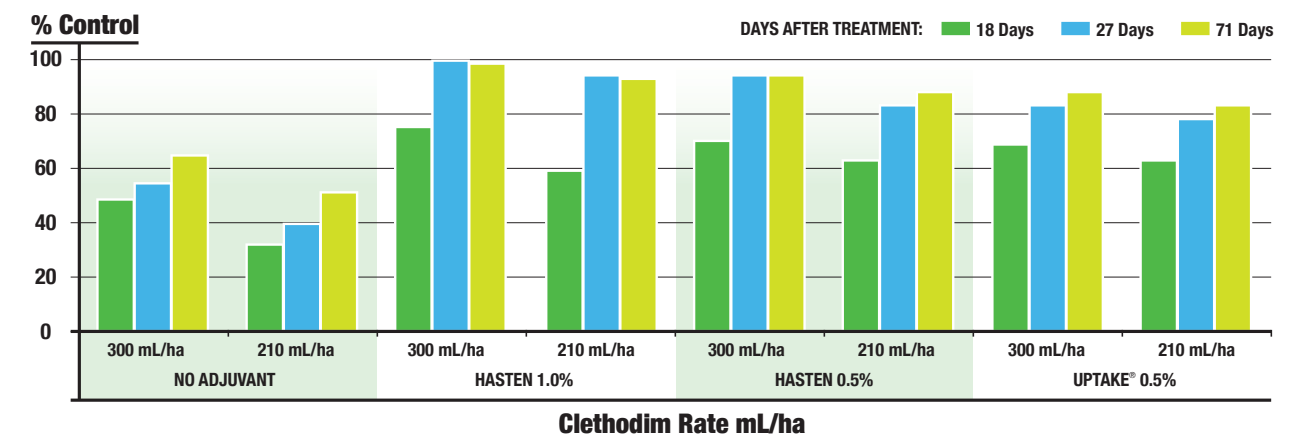
## IMPROVES RAIN FASTNESS

Glasshouse studies have shown that Adjuvants can improve the rain fastness of glyphosate. Our study shows that glyphosate maintained greater efficacy when used with HASTEN Spray Adjuvant over other adjuvants on the market. HASTEN Spray Adjuvant helps glyphosate absorb into, and penetrate the leaf cuticle improving weed control through quicker uptake and improves rainfastness.



## RYEGRASS CONTROL IN CANOLA

Field trials demonstrate the remarkable efficacy of Clethodim when mixed with HASTEN. Our studies show that using HASTEN at a rate of 0.5 L per 100 L significantly enhances the performance of Clethodim, outshining other adjuvants like Uptake<sup>®</sup> in boosting weed control effectiveness.





# MIX WITH THE BEST

Maximise your agri-chemical’s effectiveness with HASTEN Spray Adjuvant, trusted by Australia’s leading agri-chemical companies to deliver superior results.

HASTEN Spray Adjuvant ensures deep penetration through weeds’ tough waxy barriers, enhanced adhesion to the plant surface, and reduced evaporation for longer-lasting protection.

Whether you’re applying herbicides, insecticides, fungicides, or defoliants, HASTEN Spray Adjuvant boosts performance and reliability.

Choosing HASTEN Spray Adjuvant means choosing quality, consistency, and the assurance that you’re working with the very best.

COMPANY	PRODUCT	ACTIVE (S)
FUNGICIDE		
ADAMA	CUSTODIA® FORTE	AZOXYSTROBIN + TEBUCONAZOLE
	MAXENTIS®	AZOXYSTROBIN + PROTHIOCONAZOLE
	RADIAL®	AZOXYSTROBIN + EPOXYCONAZOLE
	TOPNOTCH®	AZOXYSTROBIN + PROPICONAZOLE
BAYER	PROSARO® 420SC FOLIAR FUNGICIDE	PROTHIOCONAZOLE + TEBUCONAZOLE
SIPCAM	NOVELLUS®	GERANIOL + EUGENOL + THYMOL
INSECTICIDE		
ADAMA	PRIMAL®	ACETAMIPRID
	SKOPE®	EMAMECTIN + ACETAMIPRID
BASF	VERSYS®	AFIDOPYROPEN
BAYER	MOVENTO® 240 SC INSECITICIDE	SPIROTETRAMAT
FMC	BENEVIA® INSECTICIDE	CYANTRANILAPROLE
SYNGENTA	MINECTO® FORTE	CYANTRANILAPROLE + DIAFENTHIURON
UPL	MAINMAN® 500 WG INSECTICIDE	FLONICAMID
DEFOLIANT		
SIPCAM	ETEE® DEFOLIANT	PYRAFLUFEN-ETHYL + THIDIAZURON

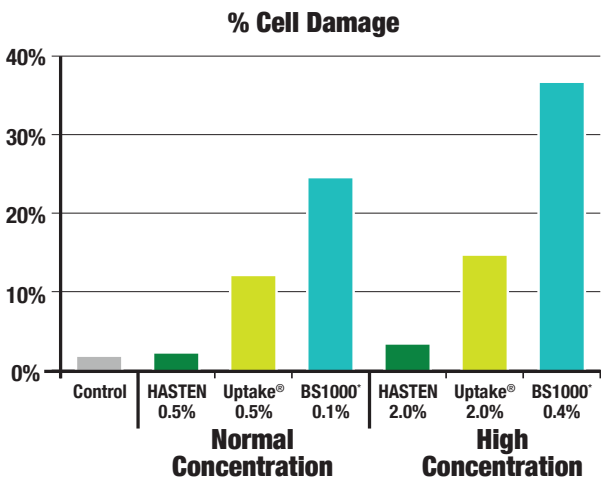
COMPANY	PRODUCT	ACTIVE (S)
HERBICIDES		
ADAMA	RAPTOR®	IMAZAMOX
	TENET® 500 SC HERBICIDE	METAZACHLOR
	SHOGUN®	PROPAQUIZAFOP
BASF	CLERANDA® HERBICIDE	IMAZAMOX + METAZACHLOR
	FREQUENCY® HERBICIDE	TOPRAMEZONE
	INTERVIX® HERBICIDE	IMAZAMOX + IMAZAPYR
	SHARPEN® HERBICIDE	SAFLUFENACIL
BAYER	ATLANTIS® OD SELECTIVE HERBICIDE	MESOSULFURON-METHYL
	INFINITY® ULTRA	PYRASULFATOLE + DIFLUFENICAN
	PRECEPT® SELECTIVE HERBICIDE	PYRASULFOTOLE + MCPA 2-ETHYLHEXYL ESTER
	VELOCITY® SELECTIVE HERBICIDE	PYRASULFOTOLE + BROMOXYNIL ESTER
CORTEVA	AGIXA® RINSKOR® ACTIVE HERBICIDE	FLORPYRAUXIFEN BENZYL + PICLORAM + TRICLOPYR
	TORDON® REGROWTHMASTER HERBICIDE	AMINOPYRALID + PICLORAM + TRICLOPYR
	UBENIQ® RINSKOR® ACTIVE HERBICIDE	FLORPYRAUXIFEN BENZYL
ENVU	DESTINY®	IODOSULFURON
FMC AUSTRALIA	HAMMER® 400EC	CARFENTRAZONE
SIPCAM	AGGRESSOR® AX	QUIZALOFOP-P-ETHYL
	CHEETAH® GOLD	SETHOXYDIM + DICLOFOP-METHYL + FENOXAPROP
	DECISION®	SETHOXYDIM + DICLOFOP-METHYL
	TARGA®BOLT	QUIZALOFOP-P-ETHYL
	TERBYNE®	TERBUTHYLAZINE
	TERBYNE® XTREME® 875WG HERBICIDE	TERBUTHYLAZINE
SUMITOMO	VALOR® 500 WG HERBICIDE	FLUMIOXAZIN
	VALOR® EZE HERBICIDE	FLUMIOXAZIN
SYNGENTA	B-POWER®	BUTAFENACIL
	GESAPRIM® GRANULES	ATRAZINE
	TALINOR®	BICYCLOPYRONE + BROMOXYNIL
	TOPIK® 240 EC	CLODINAFOP-PROPARGYL
UPL	BLAZER® SELECTIVE HERBICIDE	ACIFLUORFEN
	SELECT® XTRA HERBICIDE	CLETHODIM
GENERIC	MIDAS®	IMAZAPIC + IMAZAPYR + MCPA
	SPINNAKER®	IMAZETHAPYR

# ENVIRONMENTAL SAFETY

VICCHEM's HASTEN Spray Adjuvant, crafted from 100% Australian-grown canola oil, offers a non-hazardous solution that prioritises the safety of farmers, crops, and the broader ecosystem. By adhering to label instructions, you ensure a secure environment for both the present and the future.

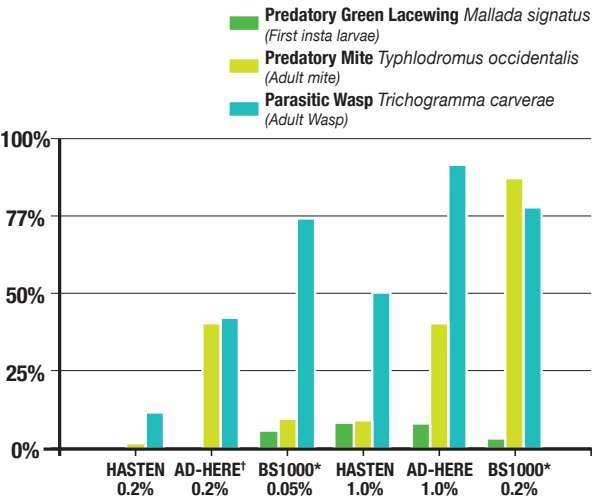
## CROP SAFETY

HASTEN Spray Adjuvant is recognised for its high degree of in-crop safety when used according to label directions. In our pursuit of superior products, VICCHEM conducted a laboratory study comparing the phytotoxic potential of different adjuvants. The study revealed that HASTEN Spray Adjuvant caused minimal cellular changes, especially when compared to others in the market, underscoring its gentler approach and reinforcing our commitment to your crop's safety.



## BENEFICIAL INSECT & MITE SAFETY

At VICCHEM, we understand the importance of beneficial insects and mites in maintaining the balance of our ecosystem. Our research into the effects of adjuvants on these crucial helpers has led to a significant discovery. While some adjuvants may harm these tiny allies, HASTEN Spray Adjuvant stands out for its safety. As demonstrated in our 'Insect and Mite Mortality – Adjuvant Use' study, HASTEN Spray Adjuvant has shown to be considerably less harmful, reflecting our commitment to product safety for both crops and the invaluable insects and mites that support them.



## AQUATIC SAFETY

VICCHEM's commitment to environmental care extends to our waterways. HASTEN Spray Adjuvant has been rigorously tested for aquatic toxicity and is confirmed non-toxic, exceeding OECD202 and OECD203 standards for safety to daphnia and fish.

AQUATIC SAFETY TEST	DESCRIPTION	RESULTS
OECD202	TOXICITY TO DAPHNIA	>100 mg/L NON TOXIC
OECD203	TOXICITY TO FISH	>100 mg/L NON TOXIC

## BEE SAFETY

Ensuring wellbeing of bees is a cornerstone of our ecological responsibility. In a comprehensive study a solution with 1% of HASTEN Spray Adjuvant was sprayed directly to bees and showed no bee mortality after 24 hours establishing its safety for these essential pollinators.



# DELIVERING BETTER ON-FARM PERFORMANCE

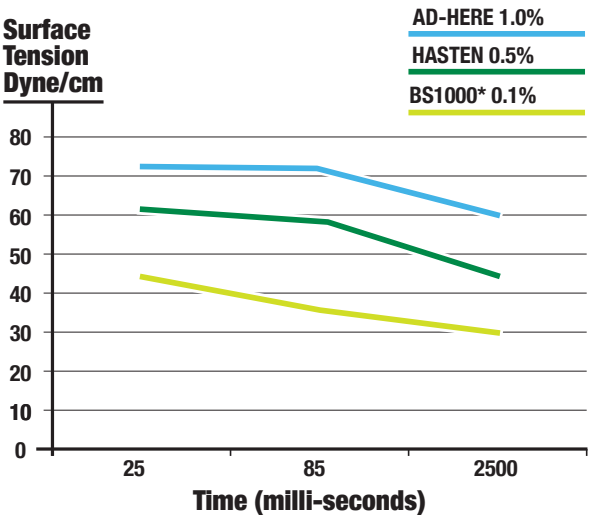
VICCHEM's HASTEN Spray Adjuvant, with its specially formulated ethylated canola oil, is designed to enhance your farming performance. It not only increases the efficacy of your spray deposits but also ensures these benefits are delivered in a way that is considerate of the environment and your crops.

## BETTER SPREADING & SLOWER EVAPORATION

HASTEN Spray Adjuvant's superior formulation provides optimal droplet spread without excessive thinning, ensuring that your agri-chemicals stay where they're sprayed. Its oil-based nature slows down evaporation, allowing more time for the actives to penetrate the plant's waxy cuticle, which translates to more effective herbicide action and improved crop yields.

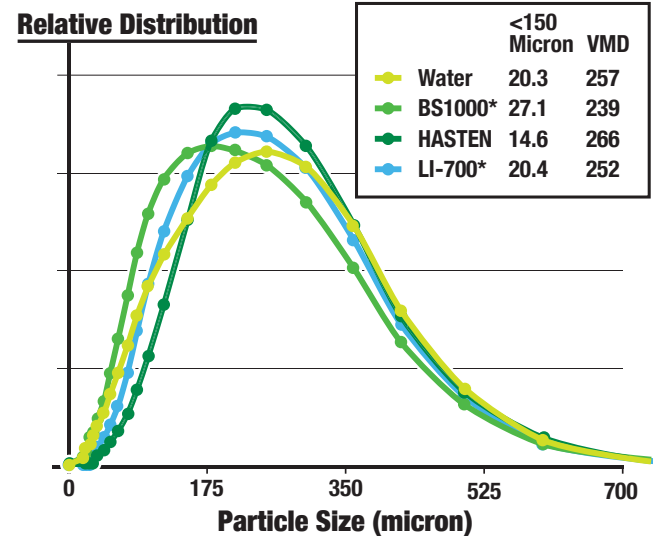
## IMPROVED ADHESION

Adhesion is vital, and Dynamic Surface Tension is where HASTEN Spray Adjuvant excels. It quickly lowers the surface tension of your solution, improving the stickiness of droplets upon contact with foliage. This minimises losses from droplet bounce-off or runoff, securing the agri-chemicals where they are most needed.



## REDUCED DRIFT

With HASTEN Spray Adjuvant, you benefit from larger droplet sizes that significantly cut down on drift, leading to a more targeted application. This reduction in drift isn't just about conserving your agri-chemical, it's about ensuring the product reaches the intended site, minimising waste and environmental impact.



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## AVAILABLE FROM YOUR LOCAL RURAL RETAILER

For further information visit [VICCHEM.COM.AU](http://VICCHEM.COM.AU) OR  
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VICCHEM's HASTEN Spray Adjuvant  
is approved by Australian Certified  
Organic as a Certified Allowed  
Input for organic farming.



We encourage you to  
recycle your VICCHEM 5, 10  
and 20 L containers at your local  
drumMUSTER recycling location.

[drummuster.org.au](http://drummuster.org.au)



VICCHEM is proudly  
Australian owned  
and manufactured.

## VICCHEM WAREHOUSE LOCATIONS



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